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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,363	04/25/2001	Ahmad Ansari	7780/13 (T00341)	6562

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AT & T Legal Department - BHGL
Attn: Patent Docketing Room 2A-207
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EXAMINER	
RAMAN, USHA	

ART UNIT	PAPER NUMBER
2424	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/842,363	ANSARI ET AL.	
	Examiner	Art Unit	
	USHA RAMAN	2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 18, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-4, 6-13, 15-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gemmell (US PG Pub. 2002/0116473) in view of Tillman et al. US Pat. (6,496,980).

With regards to claims 1, and 21, Gemmell discloses a method of downloading a video content representing a program to a subscriber terminal comprising:

Decomposing video content into a plurality of video quality portions [0006]: a low quality video portion of the plurality video quality portions comprising a complete copy of the program at a video lower than at least one of the plurality of video quality portions [0006], [0015];

Downloading a complete copy of the low quality video portion to the subscriber terminal ([0044] “single client request results in data streams of the requested layer

begin transmitted in their entirety from the server") over a network [0033] for storage locally at the subscriber terminal (208), [0042];

Receiving from the subscriber terminal a selection request for the program corresponding to the video content after downloading the complete copy of the low quality video portion ([0042] “during the user directed second play back…”)

Downloading at least one of the plurality of video quality portions having a video quality higher than a low quality video portion to the subscriber terminal over the network in response to the selection request ([0042] “during a user-directed second playback, layer 2 is streamed, stored…”).

Gemmell discloses the client computer is coupled over a network (such as LAN, WAN, etc.) to the server [0033], [0034]. Gemmell additionally discloses that the transmission of layers separately is particularly advantageous in bandwidth limitations based on network capacity/types [0004]. Gemmell is however silent on downloading the plurality of quality portions via a digital subscriber line.

In an analogous art, Tillman is evidence that digital subscriber lines were well known in the art of time for network connection and further evidence for downloading plurality of quality portions over a bandwidth constrained network such as the digital subscriber line (see column 3 lines 58-64).

All the claimed elements were known in the prior art and one skilled in the art could have easily combined the methods of transmitting the various quality portions via a digital subscriber line connection with no change in their respective functions,

and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

With regards to claim 3, the system comprises video content (Gemmell: [0043]). Gemmell is silent on the compressing the video content, however Tillman is evidence that compressing the video content was well known in the art at the time of the invention (see column 5 lines 14-18). It would have been obvious to one of ordinary skill in the art to compress the video content so that storage space and transmission bandwidth for the video content can be reduced.

With regards to claims 4, and 13, the modified system further comprises the step of compressing the video content using a transform based compression technique (H.263+). See Tillman: column 5, lines 14-17.

With regards to claims 6, and 15, the modified system discloses that at least one of the plurality of video quality portions having a quality higher than the low quality version is downloaded to the subscriber in real time (Gemmell: [0042], [0040], [0005], second layer is streamed upon user directed second playback request).

With regards to claims 7, and 16, the modified system further comprises, wherein each video quality portions represents a different level of service quality (Gemmell: [0018]. [0053]-[0057]).

With regards to claims 8, 17, 23 and 24, the modified system further comprises the step of determining a download bandwidth available to subscriber terminal (Gemmell: [0035]) and selecting at least one of the plurality of video quality portions

having a quality higher than the low quality portion based on the download bandwidth (Gemmell: [0035]).

With regards to claims 9, and 22, the modified system discloses a hierarchical layer wherein each enhancement layer enhances the lower layers but do not repeat the data from the lower layers (Gemmell: [0006]). This reads on the claimed pyramidal scheme.

With regards to claim 10, the modified system further discloses the method of recomposing a plurality of downloaded video quality portions representing at the subscriber terminal for presenting the content to a user (Gemmell: [0012],[0040]).

With regards to claim 11, Gemmell discloses a video repository (server) for storing a plurality of higher quality parts of decomposed videos (enhancement layers, [0006], [0015]):

a Subscriber unit (client) for storing one or more lower quality parts [0042] of the decomposed video corresponding to the higher quality parts stored in the repository, the one or more low quality parts comprising a complete copy of the video [0044], the subscriber unit including a user interface (input devices, [0032]) for permitting a user to select a video corresponding to the locally stored lower quality parts after storing the one or more low quality parts comprising the complete copy of the video ([0037], [0041]) wherein the selection of the video generates a subscriber request ([0036], [0042]), and

a network [0033] operatively coupled to the repository and the subscriber unit for transferring the subscriber request and the higher quality parts of the videos;

wherein in response to the subscriber request, the video repository downloads at least one of the higher quality parts corresponding to the subscriber [0042] to be combined with one of the lower quality parts stored by the subscriber unit [0040].

Gemmell discloses the client computer is coupled over a network (such as LAN, WAN, etc.) to the server [0033], [0034]. Gemmell additionally discloses that the transmission of layers separately is particularly advantageous in bandwidth limitations based on network capacity/types [0004]. Gemmell is however silent on downloading the plurality of quality portions via a digital subscriber line. Gemmell is further silent on the step of storing videos based on a predetermined compression algorithm.

In an analogous art, Tillman is evidence that digital subscriber lines were well known in the art of time for network connection and further evidence for downloading plurality of quality portions over a bandwidth constrained network such as the digital subscriber line (see column 3 lines 58-64). Tillman additionally discloses the step of compressing and encoding video based on predetermined compression algorithm (see column 5 lines 14-18)

All the claimed elements were known in the prior art and one skilled in the art could have easily combined the methods of storing video according to predetermined compression algorithm for reduced storage space and transmission bandwidth and transmitting the various quality portions via a digital subscriber line connection with no change in their respective functions, and the combination would

have yielded predictable results to one of ordinary skill in the art at the time of the invention.

With regards to claim 12, the modified system further comprises asymmetrical bandwidth for the communication path. See Tillman: column 4, lines 7-8.

With regards to claim 18, Gemmell discloses a set top box [0026] comprising:

A memory (computer storage media) for locally storing one or more complete low quality video portions of the content files representing programs [0029], [0042].

A user interface (input devices) for allowing a user to select one of the content files for viewing in real time after storing one or more complete low quality portions [0032], [0041]-[0042].

A Network interface for causing a remote content repository to download a remotely shared portion of the selected compressed content file over a network in response to the user selection [0033], [0034], [0042].

A re-composition device for recombining the locally stored and remotely stored portions of the content file [0040].

A display interface for transferring the recombined content file to a display unit [0032].

Gemmell is silent on downloading the plurality of quality portions via a digital subscriber line and is further silent on the step of storing videos based on a predetermined compression algorithm.

In an analogous art, Tillman is evidence that digital subscriber lines were well known in the art of time for network connection and further evidence for downloading

plurality of quality portions over a bandwidth constrained network such as the digital subscriber line (see column 3 lines 58-64). Tillman additionally discloses the step of compressing and encoding video based on predetermined compression algorithm (see column 5 lines 14-18)

All the claimed elements were known in the prior art and one skilled in the art could have easily combined the methods of storing video according to predetermined compression algorithm for reduced storage space and transmission bandwidth and transmitting the various quality portions via a digital subscriber line connection with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

With regards to claim 19, the modified system the encoder compresses and encodes the video content (see Tillman: col. 5 lines 14-17), as discussed above in claim 18. Tillman further discloses that a client set top box comprises a decoder for decompressing the recombined compressed content file (see Tillman: column 5, lines 30-35). Accordingly it would have been obvious to further modify the system by employing a decoder for decompressing the recombined compressed content file for display.

4. Claims 5, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gemmell (US PG Pub. 2002/0116473) in view of Tillman et al. US Pat. (6,496,980) as applied to claims 1, 11 and 18 respectively above, and further in view of Payton (US Pat. 5,790,935).

With regards to claims 5, 14, and 20, the modified system discloses a method of "pre-fetching" certain layers so that it can be available "on-hand" in the client's memory for quick presentation (Gemmell: [0048], [0051]). Gemmell only discloses pre-fetching within the context of second and subsequent layers and silent on pre-fetching the first portion of the video.

Payton discloses a method of predicting items a subscriber might like based on user preferences and downloading such items to the subscriber terminal during off peak hours (see abstract).

It would have been obvious to one of ordinary skill in the art to advantageously incorporate the teachings of Payton by predicting what a user likes, and downloading the low quality portion of the predicted items to the user's terminal during off peak times so that the predicted items can be available "on hand" for immediate playback, wherein the user can examine the video and determine if a higher quality for the video is desired.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USHA RAMAN whose telephone number is (571)272-7380. The examiner can normally be reached on Tue-Fri: 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2424

/Usha Raman/